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EXAMINER

BOCCIO, VINCENT F

ART UNIT

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2158

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/609,182	Applicant(s) DUNBAR ET AL.	
	Examiner Vincent Boccio	Art Unit 2158	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amend, Resp & RCE of 12/1/2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 24-36, 38 and 40-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 24-36 and 38, 40-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2158

Response to Arguments

1. Applicant's arguments with respect to all amended claims 1-5, 24-36, 38, 40-42 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 24-36, 38, 40-42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 24-36, directed to a system, where all elements are deemed to correspond to software, such as Layer, therefore, the system claims appear read on software not embodied on medium and therefore the claims are deemed non-statutory.

The examiner suggests amending the system claims to include some form of hardware, e.g. processor and/or CPU and/or memory, based on applicant's specification.

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Regarding claims 38, 40-42, directed to a computer readable medium based on the specification below is deemed non-statutory, since the scope of the medium includes signals.

[0028] The computer 110 typically includes a variety of computer readable media. Computer readable media can be any available media that can be accessed by the computer 110 and includes both volatile and nonvolatile media, and removable and non-removable media. By way of example, and **not limitation, computer readable media may comprise computer storage media and communication media.** Computer storage media includes volatile and nonvolatile, removable and non-removable media implemented in any method or technology for storage of information such as computer readable instructions, data structures, program modules or other data. Computer storage media includes, but is not limited to, RAM, ROM, EEPROM, flash memory or other memory technology, CD-ROM, digital versatile disks (DVD) or other optical disk storage, magnetic cassettes, magnetic tape, magnetic disk storage or other magnetic storage devices, or any other medium which can be used to store the desired information and which can be accessed by the computer

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.This application currently names joint inventors. In considering patentability of the claims under 35

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U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1, 3-5, 24-36, 38-42 are rejected under 35

U.S.C. 103(a) as being unpatentable over Faiman (A Survey of the Java Media Framework 2.0) in view of Wenocur et al. (US 2002/0165912).

Regarding claim 1, Faiman discloses and meets the limitations associated with an apparatus and/or method for:

- o determining (various), capabilities of a media system,
- o the method comprising:
 - o querying each of one or more functional objects in the media system to determine a functional limit (see 3.5.2, "query a player ... rate of player, "Calling getRate()") of each of the one or more objects for a predetermined function);
 - and

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o determining which of the functional limits of the one or more objects maximally limits the capability of the media system for the predetermined function

(3.5.2, current parameters such as **Rate**, media time and duration, **default rate of 1.0**, based on "3.7 Media Player Bean", provide resources for a processor "4.1 Creating a Processor" "3.6.1, "Set, Maximum Latency"

Claim 1, **as amended** further recites, "**determine a maximum playback rate of a multimedia stream** wherein the one or more functional objects includes **at least a decoder** that decodes at least a portion of the multimedia stream (audio or/or video or other), wherein Faïman fails to particularly disclose.

To move prosecution forward the examiner cites Wenocur, which teaches see below:

Wenocur is deemed to teaches determining the play rate of media, in order to adapt content to the system for rendering (see 0095) and at least determining a multimedia decoding capability, in hardware and/or software, decoding, de-multiplexing either in hardware and/or software etc.,

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and processing capability, CPU Speed, memory and Software version of the Player, allows for trick play modes determinations either based on processing power and/or decoding capability of the decoders, video and/or audio, as taught by Wenocur.

[0095] **Story content creation** is advantageously automated and dynamically adaptive, because a **story is optimized over a plurality of variables** to selectively communicate elements of an e-mail message to e-mail client devices and users. **Such variables include, for example, client device hardware capabilities, network connection characteristics and user preferences.** This is accomplished from a standpoint, for example, of CPU speed, display type, screen size, the existence of and or attributes of audio and/or video capabilities, data scalability, language, use of or not use of audio or visual content, nominal speed or bandwidth of all of the communication links and protocols, and the like.

and

[1355] *In a thirtieth embodiment of the invention, the invention provides a method for scaling a procedure/data set, the method comprising steps of: performing a first attribute scaling of a message when preparing and before transmission of the message to a client device based on receiver client attributes, performing a second procedural scaling of the message including executing capability determining procedures embedded within the message after message preparation, message transmission, and message receipt, that determine receiver **client capability attributes** and select a particular message expression from a plurality of message expressions available in the received message; and performing **a third hardware abstraction layer scaling** of the particular selected message expression to adapt the selected message expression for presentation on the client device; **the receiver client attributes** are selected from the group consisting of: a message language preference; **playback engine software version number; software playback engine capabilities**; a message security preference; a message size constraint; a **speed attribute of a processor within the client device**; **an available memory attribute of a memory device connected to the processor**; **an audio capability attribute**; **a video capability attribute including video attributes for screen size, monochrome or color display capability, a number of monochrome gray scale levels or a number of presentable colors and color palate**; a*

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communication link connection speed determined substantially during preparation of the message either (i) just before preparation while the communication link is still open; (ii) prior to transmission of the message, or (iii) after initiation of transmission but prior to completion of transmission of the message; and combinations thereof; and the procedural determinations include, when first message expression is included within the plurality of message expressions, determining whether the client has a first message type presentation capability, and when the client does not have the first message type presentation capability, selecting an alternate message type expression in place of the first message type expression while still maintaining the intent of the message; the alternate message type is selected from a plurality of alternate message types for the first message type according to predetermined rules and on the client message type presentation capabilities; the predetermined selection rules include a hierarchical selection preference that selects the message presentation type that provides a maximum available amount of information possible for the client device; the hierarchical selection preference selects a message presentation type in the order of decreasing preference from highest preference to lowest preference as follows: (i) multi-media including audio and motion video content; (ii) multi-media having audio and still graphic imagery content; (iii) motion video without audio; (iv) still graphic without audio; (v) audio; and, (vi) text.

Therefore, it would have been obvious to those skilled in the art at the time of the invention to modify **Faiman by determine a maximum playback rate of a multimedia stream** wherein the one or more functional objects includes **at least a decoder,** as taught by Wenocur, thereby determining client/user system capabilities including at least one decoder for such as video and/or audio, thereby to generate multimedia within the capability of a client' or user's system.

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Regarding claims 3, Faïman discloses the predetermined function is a maximum and maximum playback rates of a multimedia stream

2.1.5 and pages 9-10, such as, "bit rate", **"Interval Between Frames"**, "processing capability and slow motion"

2.3.3, "Plugins & Processor Model"

3.5.2, "default 1.0"

3.1, Locking Resources

3.6.1, Determine Max Latency Parameter

3.7, MediaPlayer Bean

4.2, Processor Configuration

Regarding claim 4, Faïman discloses determining a minimum playback rate and the maximum playback rate in a set of modes including: reverse skip mode, reverse key frame mode, reverse full mode, forward full mode, forward key frame mode, forward skip mode (3.3 etc.).

Regarding claim 5, the combination as applied above with Faïman discloses the one or more functional objects include a media source object, a transform object, and a media sink object (2.3.2).

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Regarding claim 24 is analyzed and discussed with respect to the claim above, based on the combination with Faiman further discloses a multimedia system comprising:

- o a control layer configured to receive one or more media data streams from an application

(Fig. 5.1 a & 3.2)

- o a core layer coupled to the control layer, the control layer including a media engine component configured to query each of one or more core layer components in the multimedia system to determine a functional rate limit of each core layer component for a predetermined function, the media engine configured to determine which of the functional limits of the core layer components maximally limits the multimedia system

(2.1.2, 2.3.2, 3.3, 3.5.2, 3.6, 4.1 and 4.2).

Regarding claim 25, the combination of Faiman, as applied above, discloses one or more media sources coupled to the control layer, the media sources configured as inputs to the multimedia system;

- o one or more stream sources coupled to the control layer, the stream sources providing the media

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data streams; one or more transforms coupled to the control layer, the transforms configured to operate on the media data streams (see API, Bean, Player, 5.0 to 5.1.1);

- o one or more media sinks coupled to the control layer, the media sinks configured to operate as outputs for the media data streams; and one or more stream sinks coupled to the control layer, the stream sinks configured to store or render the media data streams.

(2.3.2, 2.1.2, 4.1-4.3, 4.6 & Fig. 5)

Regarding claim 26, the combination with Faiman as applied above, further discloses the control layer includes: the media engine;

- o a topology loader configured to identify data flow; a media session configured to interface with core layer components; and a media processor configured to perform transforms on the media data streams (see paragraphs 2.2.2 and 4.1).

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Regarding claim 27, the combination with Faiman as applied above further discloses the media engine interacts with

- o a plurality of components in the core layer and the control layer to provide rate changes and rates, the media engine configured to use floating point values to linearly indicate a speed of playback (3.3 & 3.5.2).

Regarding claim 28, the combination with Faiman as applied above further discloses a negative rate specifies a backward playback (see paragraph 3.3).

Regarding claim 29, the combination with Faiman as applied above, further discloses the core layer further includes a media source, the media source configured to provide

- o a presentation timestamp for media samples on the media stream, the samples configured to preserve the presentation timestamp independent of a rate for media playback (see paragraphs 3.7-3.8).

Regarding claim 30, Faiman discloses the multimedia system further includes

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o a presentation clock configured to run time according to a current rate, and the core layer further includes one or more media sinks coupled to the presentation clock, the media sinks configured to display data according to the presentation clock and independent of non-presentation clock component timestamps (3.3, 3.4, 4.0).

Regarding claim 31, Faïman discloses the media engine is configured to respond to requests for rate direction changes by playing out any remaining content up to a timestamp of a direction change, discarding any data in a pipeline, setting a rate of playback and restarting playback in the opposite direction in accordance with the direction change (3.2 to 3.5.2 and 5.1.2).

Regarding claim 32, Faïman discloses data repeated after the restarting playback is discarded (3.5).

Regarding claim 33, Faïman the media engine is configured to be independent of tracking multiple playback rates unless the rates are within a same mode (2.1.5 & 2.3.3).

Regarding claim 34, Faïman discloses one or more components in the core layer are configured to maintain a

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list of pending rate changes, each component having active only one rate at a time, each component configured to maintain a playback rate independent of tracking rate changes (3.0-3.1).

Regarding claim 35, Faïman discloses the media engine is configured to support backward decoding for coder-decoders that do not support backward decoding; the media engine configured to perform forward decoding, and reverse any decoded samples (3.2-3.4).

Regarding claim 36, Faïman discloses the reversed decoded samples are available for reuse (5.0).

Regarding claims 38, 40-42, are deemed to be analyzed and discussed with respect to the claims above.

Contact Information

Any inquiry concerning this communication or earlier communications should be directed to the examiner of record Vincent F. Boccio whose telephone number is (571) 272-7373.

The examiner can normally be reached on between Monday-Thursday between (7:30 AM to 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ali, can be reached on (571) 272-4105.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vincent F. Boccio/
Primary Examiner